

CLAIMS

1. A method of assisting the steering of steered
5 wheels of a vehicle, in which a phase advance is
applied between a steering wheel and a rack element so
as to decrease the response time of the vehicle to an
action of the driver of the vehicle on said steering
wheel.
- 10 2. The method as claimed in claim 1, in which the
speed of rotation and the angular acceleration of the
steering wheel are measured or estimated and a steered
wheels steering preset is emitted as a function of said
15 speed of rotation and angular acceleration.
3. The method as claimed in claim 2, in which the
speed of rotation and the angular acceleration of the
steering wheel are compared with predetermined
20 thresholds, a phase advance being applied in case of
overshoot of said thresholds.
4. The method as claimed in any one of the preceding
claims, in which the steering preset is calculated on
25 the basis of the angle of steer of the steered wheels
and of a temporal advance.
5. The method as claimed in claim 4, in which the
temporal advance is calculated on the basis of the
30 angle of the steering wheel.
6. A system for assisting the steering of steered
wheels of a vehicle (1), characterized in that it
comprises a means for applying a phase advance between
35 a steering wheel (8) and a rack element (14).
7. The system as claimed in claim 6, characterized in
that it comprises a sensor (9) of parameters of

rotation of the steering wheel (8).

8. The system as claimed in claim 6 or 7, characterized in that the means for applying a phase
5 advance comprises a control unit (10) receiving as input, parameters of rotation of the steering wheel (8), and provided with a means of calculation for calculating a phase advance dependent on parameters of rotation of the steering wheel (8).

10

9. The system as claimed in any one of claims 6 to 8, characterized in that the means for applying a phase advance comprises a means for calculating a temporal advance as a function of angular parameters of the
15 steering wheel, and a means (25) for calculating a steer angle preset as a function of angular parameters of steering of the steered wheels and of the temporal advance.

20 10. The system as claimed in claim 9, characterized in that the means for calculating a temporal advance as a function of angular parameters of the steering wheel comprises a fuzzy logic element (28) for formulating a confidence index and a table (24) for deducing a
25 temporal advance from the confidence index.